



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,749	03/07/2001	Mingliang L. Tsai	H0001805 (4300)	4760

7590

04/29/2003

Roger H. Criss  
Honeywell International Inc.  
P.O. Box 2245  
101 Columbia Road  
Morristown, NJ 07962

EXAMINER

NOLAN, SANDRA M

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 04/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/800,749

Applicant(s)

TSAI ET AL.

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1 and 4-50 is/are allowed.
- 6) ☒ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claims***

1. Upon entry of the amendment in the response dated 12 February 2003 (Paper No. 9), claims 1 and 4-50 are pending. Upon reconsideration, the restriction requirement has been rescinded and nonelected claims 19-23 and 27-40 are rejoined with the elected claims. All pending claims are before the examiner.

### ***Rejections Withdrawn***

2. The 35 USC 112 rejection of claim 14, set forth in section 9 of the 12 November 2002 office action (Paper No. 8), is withdrawn in view of applicants' arguments in Paper No. 9.

3. The 35 USC 102 rejection of claims 1-4, 6-9, 13, 15-17, 24, and 26 as anticipated by Tai et al (EPO 1033080 A2), as recited in section 11 of Paper No. 8, is withdrawn in view of applicants' amendments in Paper No. 9.

4. The 35 USC 103 rejection of claim 5 as being unpatentable over Tai in view of JP 10287871 (abstract), as recited in section 13 of Paper No. 8, is withdrawn in view of applicants' amendments in Paper No. 9.

5. The 35 USC 103 rejection of claim 10 as unpatentable over Tai in view of applicants' admission at page 3, lines 27+ of the specification, as set out in section 14 of Paper No. 8, is withdrawn in view of applicants' amendments in Paper No. 9.

Art Unit: 1772

6. The 35 USC 103 rejection of claims 11, 12, 18 and 25 as unpatentable over Tai in view of VeSpeer (US 5,942,297), as set out in section 10 of Paper No. 8, is withdrawn in view of applicants' amendments in Paper No. 9.

### ***New Rejections***

#### **Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4-9, 11-17, 1-22, 24, 26-44 and 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laplante (US 2002/0002238A1) in view of Little et al (US 6,074,717 A).

Laplante is available as a reference and is afforded the benefit of its earliest priority date, that is, 19 May 2000). It teaches blends of oxygen barrier polymers, such as EVOH (abstract) with polybutadiene oxygen scavenging polymers (page 3, par 0030) and metal salts (page 5, pars 0057-0059). The blends can be used in multilayer articles (claim 49 of the publication) and as core layers with other polymers (page 6, par. 0081). Oriented films are disclosed (page 9, par. 01117).

Laplante fails to teach anhydride functional polybutadiene.

Little teaches polybutadiene-maleic anhydride adduct resins (col. 2, lines 33 and 37) as additives in laminated barrier structures. The structures have superior delamination resistance (col. 1, lines 48-50).

The references are analogous because they both deal with multilayer barrier structures.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the adduct resins of Little in structures of Laplante in order to produce multilayer articles having delamination resistance.

The motivation to employ the adduct resins of Little in the structures of Laplante is found at col. 1, lines 48-50 of Little, where delamination resistance is taught.

It is deemed desirable to make articles that resist delamination in order to increase their useful lives.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laplante and Little as applied to claims 1, 4-9, 11-17, 1-22, 24, 26-44 and 46-50 above, and further in view of applicants' admission at page 3 of the specification that retortable EVOH is known.

Laplante and Little are discussed above.

They fail to teach retortable EVOH.

The citations are analogous because they both deal with EVOH.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the retortable EVOH discussed in the specification as

Art Unit: 1772

the EVOH in the composite structures suggested by the combination of Laplante and Little in order to produce articles that can be retorted.

The motivation to employ retortable EVOH is found in the specification at page 3, where the conventionality of retortable EVOH in similar articles is taught.

It is deemed desirable to make retortable articles in order to facilitate the sterilization of foods contained therein.

10. Claims 18, 23, 25, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laplante and Little as applied to claims 1, 4-9, 11-17, 1-22, 24, 26-44 and 46-50 above, and further in view of Tai (EPO 1033080 A2).

Laplante and Little are discussed above.

They fail to teach the use of clays.

Tai teaches hydrotalcite clays as thermal stabilizers (col. 20, lines 50-52) in similar barrier resin/metal salt/thermoplastic compositions (abstract) for use in multilayer articles.

The references are analogous because they all deal with multilayer barrier composites.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the hydrotalcite of Tai as a thermal stabilizer in the composites suggested by the combination of Laplante and Little in order to stabilize the compositions from heat during processing.

Art Unit: 1772

The motivation to employ the clays of Tai in the composites suggested by Laplante and Little is found at col. 20, lines 50-52 of Tai, where their use as thermal stabilizers is taught.

It is deemed desirable to make composites from thermally stable compositions/-composites in order to better control the manufacture of articles therefrom.

***Final Rejection***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1772

***Conclusion***

Any inquiry concerning this communication should be directed to the Examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number for the art unit is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.



S. M. Nolan  
Patent Examiner  
Technology Center 1700

SMN/smn  
09800749(10)  
23 April 2003